25

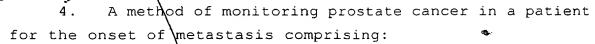


- 47 -

## What is claimed is:

- 1. A method for diagnosing the presence of prostate cancer in a patient comprising:
- (a) determining levels of CSG in cells, tissues) or (bodily) fluids in a patient; and
- (b) comparing the determined levels of CSG with levels of CSG in cells, tissues or bodily fluids from a normal human control, wherein a change in determined levels of CSG in said patient versus normal human control is associated with the presence of prostate cancer.
  - 2. A method of diagnosing metastases of prostate cancer in a patient comprising:
  - (a) identifying a patient having prostate cancer that is not known to have metastasized;
- 15 (b) determining CSG levels in a sample of cells, tissues, or bodily fluid from said patient; and
- (c) comparing the determined CSG levels with levels of CSG in cells, tissue, or bodily fluid of a normal human control, wherein an increase in determined CSG levels in the patient versus the normal human control is associated with a cancer which has metastasized.
  - 3. A method of staging prostate cancer in a patient having prostate cancer comprising:
    - (a) identifying a patient having prostate cancer;
  - (b) determining CSG levels in a sample of cells, tissue, or bodily fluid from said patient; and
- (c) comparing determined CSG levels with levels of CSG in cells, tissues, or bodily fluid of a normal human control, wherein an increase in determined CSG levels in said patient versus the normal human control is associated with a cancer which is progressing and a decrease in the determined CSG levels is associated with a cancer which is regressing or in remission.

15



- (a) identifying a patient having prostate cancer that is not known to have metastasized;
- (b) periodically determining levels of CSG in samples of cells, tissues, or bodily fluid from said patient; and
- (c) comparing the periodically determined CSG levels with levels of CSG in cells, tissues, or bodily fluid of a normal human control, wherein an increase in any one of the periodically determined CSG levels in the patient versus the normal human control is associated with a cancer which has metastasized.
  - 5. A method of monitoring a change in stage of prostate cancer in a patient comprising:
    - (a) identifying a patient having prostate cancer;
  - (b) periodically determining levels of CSG in cells, tissues, or bodily fluid from said patient; and
- (c) comparing the periodically determined CSG levels with levels of CSG in cells, tissues, or bodily fluid of a normal human control, wherein an increase in any one of the periodically determined CSG levels in the patient versus the normal human control is associated with a cancer which is progressing in stage and a decrease is associated with a cancer which is regressing in stage or in remission.
- 6. A method of identifying potential therapeutic agents for use in imaging and treating prostate cancer comprising screening molecules for an ability to bind to CSG wherein the ability of a molecule to bind to CSG is indicative of the molecule being useful in imaging and treating prostate cancer.
- 7. The method of claim 1, 2, 3, 4, 5 or 6 wherein the CSG comprises SEQ ID NO:1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12,

- 13, 14, 15, \\ 16, 17, 18, 19 or 20 or a polypeptide encoded thereby.
  - 8. An antibody which specifically binds CSG.
- 9. A method of imaging prostate cancer in a patient 5 comprising administering to the patient an antibody of claim 8.
  - 10. The method of claim 9 wherein said antibody is labeled with paramagnetic ions or a radioisotope.
- 11. A method of treating prostate cancer in a patient 10 comprising administering to the patient an antibody of claim 7.
  - 12. The method of claim 11 wherein the antibody is conjugated to a cytotoxic agent.